

ABSTRACT

A process to separate solids from a solids laden gaseous flow containing more than 100 mg/Nm³ solids by performing the following steps:

- (a) separating solids from the gaseous flow using a gas-solids separator resulting in a gaseous flow containing less than 50 mg/Nm³ solids and an underflow having the separated solids and part of the gaseous flow as fed to the gas-solids separator;
- (b) separating part of the solids from the underflow in a cyclone wherein solids and a gaseous flow containing still some solids are obtained; and
- (c) contacting the gaseous flow obtained in step (b) with water to separate the solids and obtain a gaseous flow containing between 0 and 50 mg/Nm³ solids; and
- (d) combining the gaseous flows which are poor in solids as obtained in step (c) and as obtained in step (a).